

time, choice of validated patient reported outcome measures (PRO) to assess and monitor ED, and opinion on how ED is currently viewed. **RESULTS:** A total of 1658 congress delegates participated in the study, of which 1590 met the inclusion criteria. Sixty-one percent of the respondents prescribed a PDE5i as the first course of action when seeing an ED patient. Assessment of contraindications or cardiovascular risk factors, physical examination, blood pressure measurement, and laboratory tests were rarely conducted as a first course of action (1–3%, depending on the assessment/test). The most popular means of assessing and monitoring ED status was via patient interview (68%), as opposed to the use of validated PRO measures. Seventy-six percent of respondents agreed that the large number of men accessing ED medicines through uncontrolled sources represented a true medical issue and 81% agreed that actions to reduce health risks associated with such uncontrolled access to PDE5i were essential. **CONCLUSIONS:** While the EAU guidelines recommend a diagnostic workup prior to prescribing PDE5is, this study demonstrates that a majority of participating respondents initiate PDE5i treatment in an ED patient initially after a simple patient interview with no prior physical examination or diagnostic testing.

INFECTION—Clinical Outcomes Studies

PINI

A BAYESIAN META-ANALYSIS OF THE EFFICACY OF SIX ANTIMICROBIAL AGENTS FOR CONFIRMED STAPHYLOCOCCUS AUREUS COMPLICATED SKIN AND SOFT-TISSUE INFECTIONS (CSSTIS)

Logman JFS¹, Treur MJ¹, Verheggen BG¹, Heeg BMS¹, Stephens J², Spiesser J³, Simoneau D³, Haider S⁴, Nathwani D⁵, Van Hout BA¹
¹Pharmerit Europe, Rotterdam, The Netherlands, ²Pharmerit North America LLC, Bethesda, MD, USA, ³Pfizer PIO, Paris Cedex 14, France, ⁴Pfizer Inc, Groton, CT, USA, ⁵Ninewells Hospital & Medical School, Dundee, UK

OBJECTIVES: Dalbavancin is a new, once weekly, intravenous, glycopeptide antibacterial. In phase III trial, dalbavancin demonstrated comparable efficacy versus linezolid in complicated skin and soft tissue infections (cSSTIs). Teicoplanin is a key antimicrobial comparator in Europe, therefore an indirect comparison based on available published efficacy was performed in “all” *Staphylococcus aureus* (SA) patients. A Bayesian meta-analysis was conducted to compare success rates of antibacterials versus teicoplanin in cSSTIs due to SA. **METHODS:** Medline, Embase, and Cochrane databases were searched to identify clinical trials on dalbavancin, daptomycin, linezolid, telavancin, teicoplanin, tigecycline, and vancomycin in cSSTIs. Two independent reviewers completed data extraction, study quality, and heterogeneity assessment. Pooled efficacy estimates were generated based on clinical and microbiological success rates for the all SA cSSTI patients. A random effects model was used with outcome predicted by medication and confounders of success definition, dosing, age and gender. The impact of base case confounders, fixed vs random effects models and doses was investigated in sensitivity analyses. **RESULTS:** Out of 36 articles, reporting on 11 trials, 6 treatments and 17 treatment arms (n = 955) were included. Pooled success rate for teicoplanin was 88.6% (71.7;97.2) and differences versus comparators for the base case analysis are: vancomycin -9.4% (-47.1;15.5), linezolid +0.4% (-12.9;17.6), tigecycline -6% (-9.7;17.7), dalbavancin +0.5% (-12.9;16.8), and telavancin -5% (-43.7;21.5). Success rates for dalbavancin and linezolid were numerically higher versus teicoplanin, although differences were not significant. These findings were consistent in a variety of sensitivity analyses. **CONCLUSIONS:**

Dalbavancin demonstrated high microbiological success rates, comparable to teicoplanin and other antimicrobials in SA cSSTI. These data are consistent with the results of the phase III study versus linezolid. In the context of the limited numbers of patients available for some agents and the indirect nature of the comparison; further analyses are needed in this populations.

PIN2

ASSESSING ANTIMICROBIAL SUCCESS RATES IN THE TREATMENT OF METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA) COMPLICATED SKIN AND SOFT TISSUE INFECTIONS (CSSTI): A BAYESIAN META-ANALYSIS

Logman JFS¹, Treur MJ¹, Verheggen BG¹, Heeg BMS¹, Stephens JM², Haider S³, Cappelleri JC³, Nathwani D⁴, Tice A⁵, Van Hout BA¹

¹Pharmerit Europe, Rotterdam, The Netherlands, ²Pharmerit North America LLC, Bethesda, MD, USA, ³Pfizer Inc, Groton, CT, USA, ⁴Ninewells Hospital & Medical School, Dundee, UK, ⁵University of Hawaii, Honolulu, HI, USA

OBJECTIVES: To compare success rates of newer antimicrobial agents to vancomycin for treatment of MRSA cSSTIs using a Bayesian meta-analysis. **METHODS:** A systematic literature review was conducted of Medline, Embase, and Cochrane databases to identify clinical trials on dalbavancin, daptomycin, linezolid, telavancin, teicoplanin, tigecycline, and vancomycin in cSSTIs. Data extraction, study quality, and heterogeneity assessments were completed by two independent reviewers. Pooled efficacy estimates were generated based on clinical and microbiological success rates for the MRSA-subgroups in the cSSTI clinical trials using a Bayesian approach. The base case used a random effects model with outcome predicted by medication and confounders of success definition, dosing, age and gender. Sensitivity analyses included testing impact of base case confounders, fixed vs random effects models, article quality, and difference in success definition. **RESULTS:** Of 35 initially identified studies, 14 trials on six treatments with 28 treatment arms (n = 1840) met the inclusion criteria for the MRSA subpopulation and were included in the analysis. No MRSA-specific data were reported for teicoplanin, thus it was not included. MRSA-confirmed cSSTI pooled success rates and 95% credible intervals for the base case analysis were: vancomycin 74.7% (64.1–83.5%), linezolid 84.4% (76.6–90.6%), daptomycin 78.1% (54.6–93.2%), tigecycline 70.4% (48.0–87.6%), dalbavancin 87.7% (74.6–95.4%), and telavancin 83.5% (73.6–90.8%). The estimated difference with vancomycin was significant for dalbavancin, linezolid and telavancin. The finding of lower vancomycin efficacy in MRSA cSSTI was consistent in a variety of sensitivity analyses, indicating the results were robust. **CONCLUSIONS:** This meta-analysis suggests higher success rates for the novel glycopeptides and linezolid in the treatment of MRSA-confirmed cSSTIs. The uncertainty margins reflect the limited numbers of patients available for some agents and the indirect nature of the treatment comparisons. Further evidence from randomized clinical trials is needed to more definitively establish the value of the newer antimicrobials in MRSA cSSTIs.

PIN3

A SIMULATION-BASED APPROACH TO MODELING THE EFFECTS OF INTERVENTION STRATEGIES ON THE SPREAD OF MENINGOCOCCAL MENINGITIS

Smolen HJ¹, Einterz RM²

¹Medical Decision Modeling Inc, Indianapolis, IN, USA, ²Indiana University, Indianapolis, IN, USA

OBJECTIVES: To forecast through computer simulation the effectiveness of medical intervention strategies in reducing the